

MCFRS AT A GLANCE

What MCFRS Does and for Whom	How Much
<p><u>Mission</u></p> <p>The Mission of the Montgomery County Fire and Rescue Service is to protect lives, property, and the environment with comprehensive risk reduction programs; and safe, efficient, and effective emergency response provided by skilled, motivated, and compassionate service providers representing Montgomery County's diverse population.</p>	<ul style="list-style-type: none"> • FY08 Budget - \$188.8 million • 1126 County-employed emergency positions • 709 volunteer emergency personnel (FFII and above or EMS Provider I and above) • 113 County-employed tech. and admin. Positions • 45 work sites, including 34 stations • 32 engines, 24 ambulances, 17 paramedic units, 14 aerial units, 7 heavy rescue squads, 6 tankers
<p><u>Emergency Response</u></p> <p>Response to emergency medical, fire, rescue, hazardous materials, and destructive device incidents throughout the County. Incidents to which MCFRS responds occur on or in residences, other buildings, vehicles, highways, rail systems, woodlands, farmland, parks, and bodies of water.</p>	<p><u>FY07 Figures</u></p> <ul style="list-style-type: none"> • Budget: \$124 million; work years (WYs): 886.5 • 98,413 incidents • 172,780 unit responses • 75,050 EMS incidents; 908 structure fires
<p><u>9-1-1 Call-taking and Dispatch</u></p> <p>MCFRS personnel at the Emergency Communications Center take calls for assistance and dispatch MCFRS resources. They also provide pre-arrival instructions to the 9-1-1 caller as appropriate.</p>	<p><u>FY07 Figures</u></p> <ul style="list-style-type: none"> • FY07 Budget: \$6.2 million; WYs: 59.8 • Emergency calls processed (FY07): 103,758 • 9-1-1 calls answered (FY07): 139,770 • Non-emergency calls—incoming/outgoing: 188,300
<p><u>Fire Marshal's Office</u></p> <p>Fire Code Enforcement (FCE) personnel inspect buildings for fire code violations, conduct system tests, and review building plans for fire code compliance. FCE personnel provide guidance to building owners on correction of violations and conduct re-inspections to ensure code compliance.</p> <p>Fire & Explosive Investigations (FEI) personnel perform investigations of major fires, potential arsons, fires involving injuries or deaths, and incidents involving actual or potential destructive devices. FEI has a certified accelerant detection dog to assist in arson investigations.</p>	<p><u>FY07 Figures</u></p> <ul style="list-style-type: none"> • Budget: \$5.03 million; WYs: 36.9 • Fire incidents investigated: 440 • Explosive incidents investigated: 254

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FOR FIRE CHIEF THOMAS W. CARR, JR.

<p style="text-align: center;"><u>Training of Firefighter-Rescuers</u></p> <p>MCFRS firefighter-rescuers receive required training at the Fire-Rescue Training Academy, through drills at stations and in the field, and via on-line courses to achieve certifications in fire, rescue, EMS, hazmat, and command competencies. Potential recruits are mentored via the Candidate Physical Ability Training (CPAT) program to develop their physical abilities demanded by the job.</p>	<p style="text-align: center;"><u>FY07 Figures</u></p> <ul style="list-style-type: none"> • Budget: \$5.9 million, WYs: 69.7 • 321 classes taught • 7583 students attending • 315,284 student hours
<p style="text-align: center;"><u>Community Outreach</u></p> <p>MCFRS provides fire safety, injury prevention, risk reduction, child safety seat inspections, and public information through its Community Outreach Section. Emphasis is placed on children, the elderly, health care facility operators, residents of high-rises, and immigrants. The PIO provides information to the public via the broadcast and print media and via the internet.</p>	<p style="text-align: center;"><u>FY07-08 Figures</u></p> <ul style="list-style-type: none"> • FY08 Budget: \$626,311; WYs: 4.0 • Zero drownings for 4 years due to River Safety Task Force effort • ~10,000 media calls handled by PIO • ~150-175 news advisories, releases and notifications
<p style="text-align: center;"><u>Firefighter-Rescuer Wellness and Safety</u></p> <p>The Fire-Rescue Occupational Medical Section provides annual physicals, coordinates medical care for injured personnel, and provides related wellness services to keep our personnel healthy and return those injured to active service. Safety Officers inspect equipment and facilities and oversee personnel safety at major incidents. The SCBA Shop inspects and repairs SCBA.</p>	<p style="text-align: center;"><u>FY07 Figures</u></p> <ul style="list-style-type: none"> • Budget: \$10.3 million, WYs: 11.0 • 1738 annual physicals conducted in FY07 • 24 “life saves” of firefighter-rescuers by FROMS • 1000 personal protective gear inspections • 60 work site inspections • 20% reduction in WC and indemnity claims
<p style="text-align: center;"><u>Apparatus Management</u></p> <p>The Apparatus Section implements the Apparatus Management Plan. Apparatus and equipment purchase, inspection, testing, and maintenance is overseen by this Section with the exception of that handled directly by LFRDs. The new MCFRS central maintenance facility will be operated by the Apparatus Section.</p>	<p style="text-align: center;"><u>FY07 Figures</u></p> <ul style="list-style-type: none"> • Budget: \$4.37 million; WYs: 5.0 • Ordered: 3 rescue squads, 1 EMS unit • Received: 17 EMS units, 1 engine, 2 ambulance buses, and 1 medical care support unit • 286 DOT-mandated vehicle inspections performed • ~ 75-100 pumps tested; 23 aerial devices tested

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MCFRS CONTRIBUTION TO “*MONTGOMERY RESULTS:*”

- **SAFE STREETS AND SECURE NEIGHBORHOODS**
- **HEALTHY AND SUSTAINABLE COMMUNITIES**
- **A RESPONSIVE, ACCOUNTABLE COUNTY GOVERNMENT**

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FOR FIRE CHIEF THOMAS W. CARR, JR.

MCFRS HEADLINE PERFORMANCE MEASURE #1

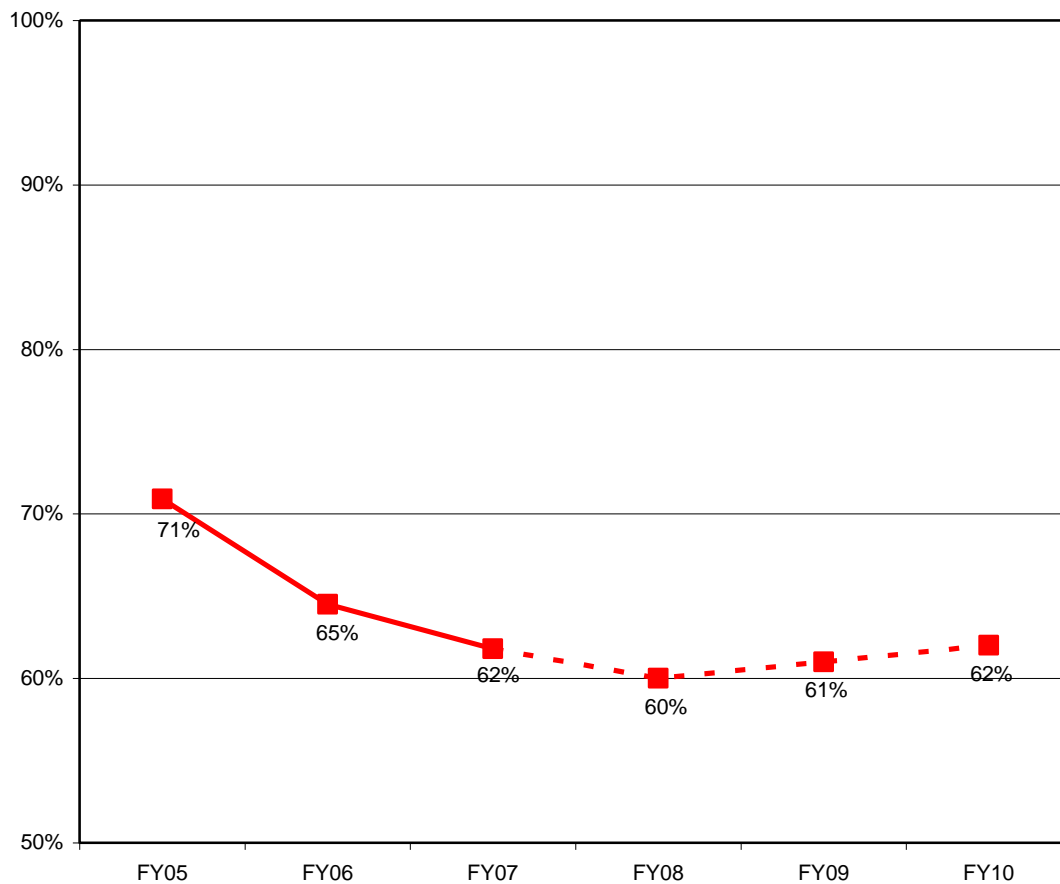
**PERCENTAGE OF RESIDENTIAL STRUCTURE FIRES
CONFINED TO THE ROOM OF ORIGIN**

1 – CONTRIBUTION TO MONTGOMERY RESULTS

See cover page

2 – PERFORMANCE

Percentage of Residential Structure Fires Confined to the Room of Origin



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FOR FIRE CHIEF THOMAS W. CARR, JR.

The solid red line in the above graph presents actual historical data for FY05-07. The dashed-red line indicates projected performance based on trend as well as the derived benefits of programs, initiatives, and resource enhancements to be implemented.

3 – STORY BEHIND THE PERFORMANCE

Many factors contribute or restrict the ability of MCFRS to confine residential structure fires to the room of origin. These factors are presented below in order of priority.

RESTRICTING FACTORS

FACT: For each minute of fire growth (absent suppression actions) in a residential structure, the fire doubles in size!

- a. **Response time exceeding goal:** As illustrated and addressed in Performance Measure #2, MCFRS is not meeting the County Council-adopted response time goal of 6 minutes for first-due engine on structure fires. After 6 minutes, the chances of containing a fire to the room of origin are greatly reduced, with flashover (the point at which the room of origin becomes engulfed in flames instantaneously) occurring within about 6 to 9 minutes of ignition. Once flashover has occurred, fire will spread rapidly beyond the room of origin.
- b. **Insufficient suppression resources:** The County lacks sufficient suppression capabilities in areas experiencing the highest rate of residential growth – suburban and rural areas. In addition, service demand is increasingly causing engines stationed closest to a reported residential fire to be unavailable. When the first-due engine is unavailable to respond, the next closest engine is dispatched which increases the distance and time the unit must travel to reach the fire; thus allowing the fire to grow in size and intensity (unless sprinklers are present).
- c. **Insufficient staffing levels on suppression units:** Only 24% of MCFRS frontline engines and aerial units by the end of FY07 had the NFPA 1710-recommended minimum staffing level of four personnel around the clock. The other 76% typically had guaranteed staffing of only three personnel. The Maryland Occupational Safety and Health Administration's "2 in - 2 out" rule requires, whenever an IDLH¹ condition is present, that two firefighters be in place outside a burning structure (serving as a rescue team) before a two-person entry team can gain entry to attack the fire.² In rural and suburban areas where the first-due engine may be the sole unit on-scene for several minutes, internal firefighting cannot be initiated until the next unit arrives and the "2-out" requirement is satisfied.

¹ IDLH – Immediately dangerous to life and health

² The only exception to the 2 in - 2 out rule is when it is evident or believed that occupants are trapped inside the burning structure.

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FOR FIRE CHIEF THOMAS W. CARR, JR.

CONTRIBUTING FACTORS

- a. **Early fire detection:** Detection of fires while in their initial stage allows early reporting to the ECC which, in turn, leads to quicker dispatch and response of fire suppression forces. Residential fire detection systems that send a signal to a central monitoring service ensure the ECC is notified quickly, even when residents are not home. When smoke alarms are not monitored, residents must contact the ECC themselves which may result in delayed response.
- b. **Presence of a sprinkler system:** Automatic sprinkler systems are a resident's best defense against a serious fire because sprinklers confine fires, save lives, and reduce property damage. Sprinklers are designed to operate in the early stages of a fire; thus controlling or extinguishing flames before they can spread beyond the room of origin.
- c. **Readily available and sufficient quantity of water:** Water is not as readily available and in sufficient quantity throughout much of the county's non-hydranted area; however, MCFRS is in the process of enhancing water delivery in rural areas. During FY09-10, MCFRS will acquire the capability to suppress fires with compressed-air foam (CAF) through its purchase of 37 CAF system-equipped pumpers. CAF extinguishes fire quicker and more effectively than larger quantities of water alone.
- d. **Appropriate suppression strategy and tactics:** Through use of "RECCEOVS" tactics³, the first hose line is immediately advanced to the room of origin to confine the fire and protect any trapped occupants as well as firefighters searching for them.
- e. **New fire stations in Germantown:** By FY10, two new fire stations will have opened on the east and west sides of Germantown⁴; thus increasing the number of engines in this high-growth area by two. This will increase the depth of resources in the up-county and allow faster response to fires; thus increasing the percentage of residential fires confined to the room of origin.
- f. **Phase 2 of fourth-person staffing:** Implementation of Phase 2A of the MCFRS' fourth-person staffing plan will occur in FY08, adding a fourth person on a select group of four down-county engines. Four-person staffing allows the first-arriving engine to begin interior fire attack immediately without having to wait for another unit to meet State "2 in – 2 out" requirements. Quick interior attack leads to the achievement of a higher percentage of fire confined to the room of origin and reduces the number of resources required for mitigation, thus preserving capacity for additional incidents.

³ Basic firefighting strategy and tactics are based on the RECCEOVS concept which identifies fire ground priorities as: rescuing occupants, covering exposures, confining the fire to the area involved, controlling the fire, extinguishing the fire, and conducting overhaul, ventilation and salvage operations.

⁴ Germantown West Station in third quarter of FY09, and Germantown East Station in first quarter of FY10

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- g. **Other contributing factors:** Other factors contributing to the confinement of residential fires to the room of origin include well-trained firefighters and code-compliant construction. Well-trained firefighters ensure the effectiveness of fire suppression tactics, and code-compliant construction contributes to slowing the spread of flames beyond the room of origin.

4 – WHAT WE PROPOSE TO DO TO IMPROVE PERFORMANCE

To move toward meeting the MCFRS' short-term goal of confining fires to the room of origin in 80% of residential fires, MCFRS plans to pursue the following actions, programs, and initiatives between FY08 and FY10:

- a. **Establish an interim station in the Travilah area:** Until the future Travilah station and two new Germantown stations (see above) are built and opened, MCFRS plans to establish an interim station on the PSTA property housing an engine and EMS unit staffed 24/7. These units will address a significant call load within the Travilah /Traville/Fallsgrove area and increase the depth of fire suppression and EMS resources in the up-county. The additional units will allow faster first-due engine and EMS response to the Travilah/Traville/Fallsgrove area and allow faster assembly of suppression forces (i.e., box alarm assignment) within the up-county area as a whole; thus increasing the percentage of fires confined to the room of origin.
- b. **Reduce response time:** Response time to residential fires can be reduced county-wide by taking steps to reduce ECC call-processing and dispatch time and by improving turnout time. [Response time is further addressed in Measure #2.]
- c. **Continue implementation of 4-person staffing:** Phases 2B and 3 of MCFRS' fourth-person staffing plan are scheduled for implementation during FY09 and FY10. Each phase will add a fourth person to a select group of engines. Four-person staffing of engines allows the first-arriving engine to begin interior fire attack immediately without having to wait for another unit to meet "2 in – 2 out" requirements.
- d. **Improve water availability:** Through recently initiated efforts to improve Insurance Services Office-issued fire protection ratings for Montgomery County (i.e., ISO Class 4 in hydranted areas and ISO Class 9 in non-hydranted areas), MCFRS will be taking steps to increase the number of ISO-certified static water supply sources throughout areas lacking hydrants. This will involve the installation of strategically located underground cisterns as well as the installation of dry hydrants and suitable access ways to drafting sites (e.g., lakes, streams).
- e. **Retrofit unsprinklered residential high-rises:** To address the county's 84 high-rise and mid-rise apartment buildings lacking sprinkler systems, MCFRS will continue advocating for legislation requiring sprinkler retrofitting. The MCFRS Code Enforcement Section will also continue working with the Apartment and Office

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Building Association to encourage building owners to voluntarily install sprinklers to increase occupants' safety and to realize savings on insurance premiums. [Sprinkler retrofitting is further addressed in Measure #3.]

5 - BUDGET

\$1.6 million* - Third recruit class for FY09

\$1.5 million* - CIP costs to establish an **interim** Travilah Fire Station on PSTA property

\$2.89 million - Annual personnel costs to operate an engine and EMS unit at the **interim** Travilah Fire Station staffed 24/7 by six personnel (27 WYs)

\$5 million* - Cost to implement Phases 2B and 3 of four-person staffing plan (FY09-10)

* Estimated cost

6 - IMPLEMENTATION

See Appendix B

7 – DATA DEVELOPMENT AGENDA

- Make improvements to the recording of incident and fire loss-related data to ensure that all required and useful data fields are completed and accurate. Training and quality assurance will be important elements of this process. All emergency response personnel should attend National Fire Incident Reporting System (NFIRS) training offered through the U.S. Fire Administration.
- Create a “canned” monthly or quarterly report showing the percentage of residential fires confined to the room of origin to enable tracking of status.

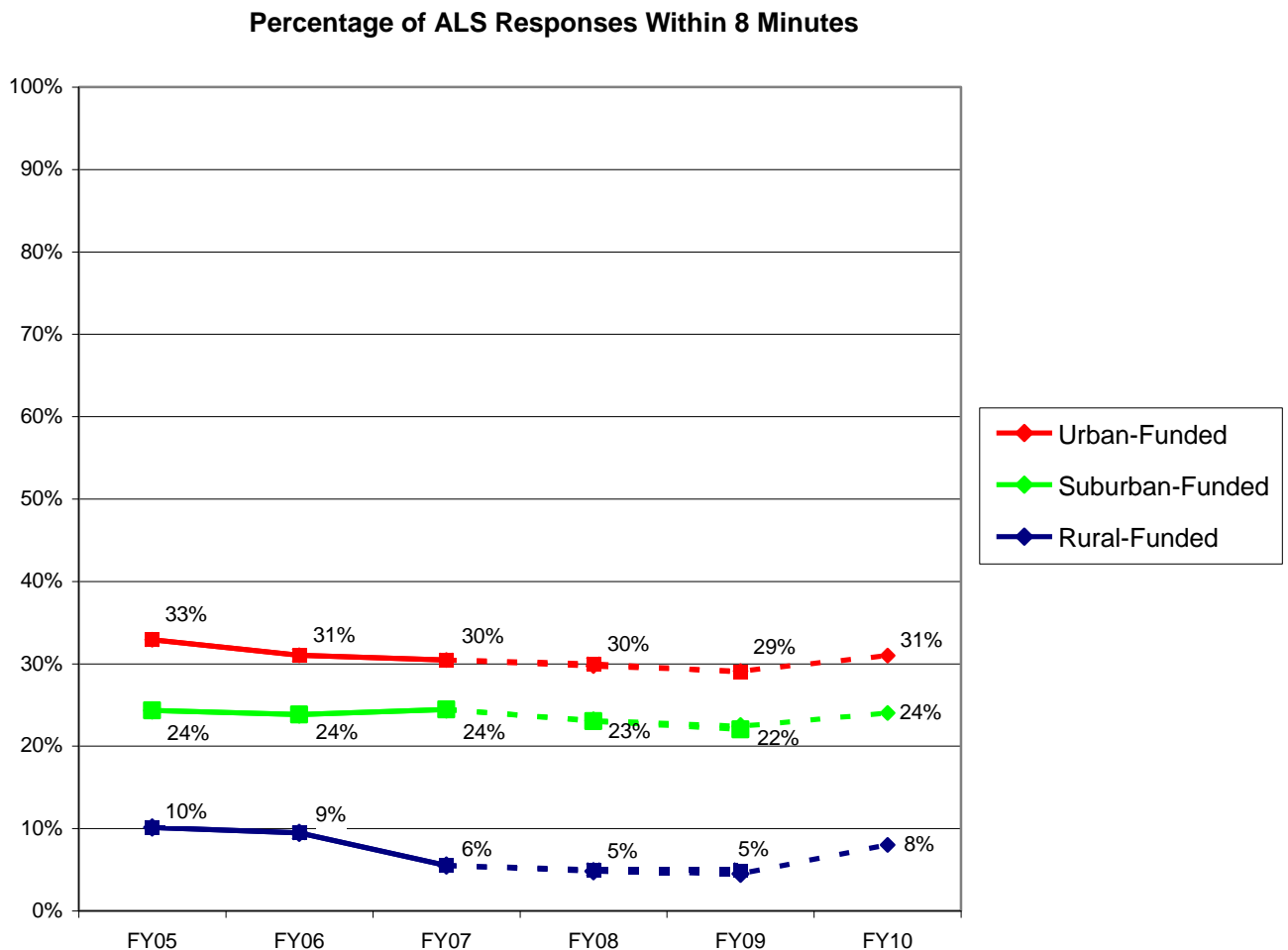
MCFRS HEADLINE PERFORMANCE MEASURE #2

RESPONSE TIME TO ADVANCED LIFE SUPPORT AND STRUCTURE FIRE INCIDENTS

1 – CONTRIBUTION TO MONTGOMERY RESULTS

See cover page

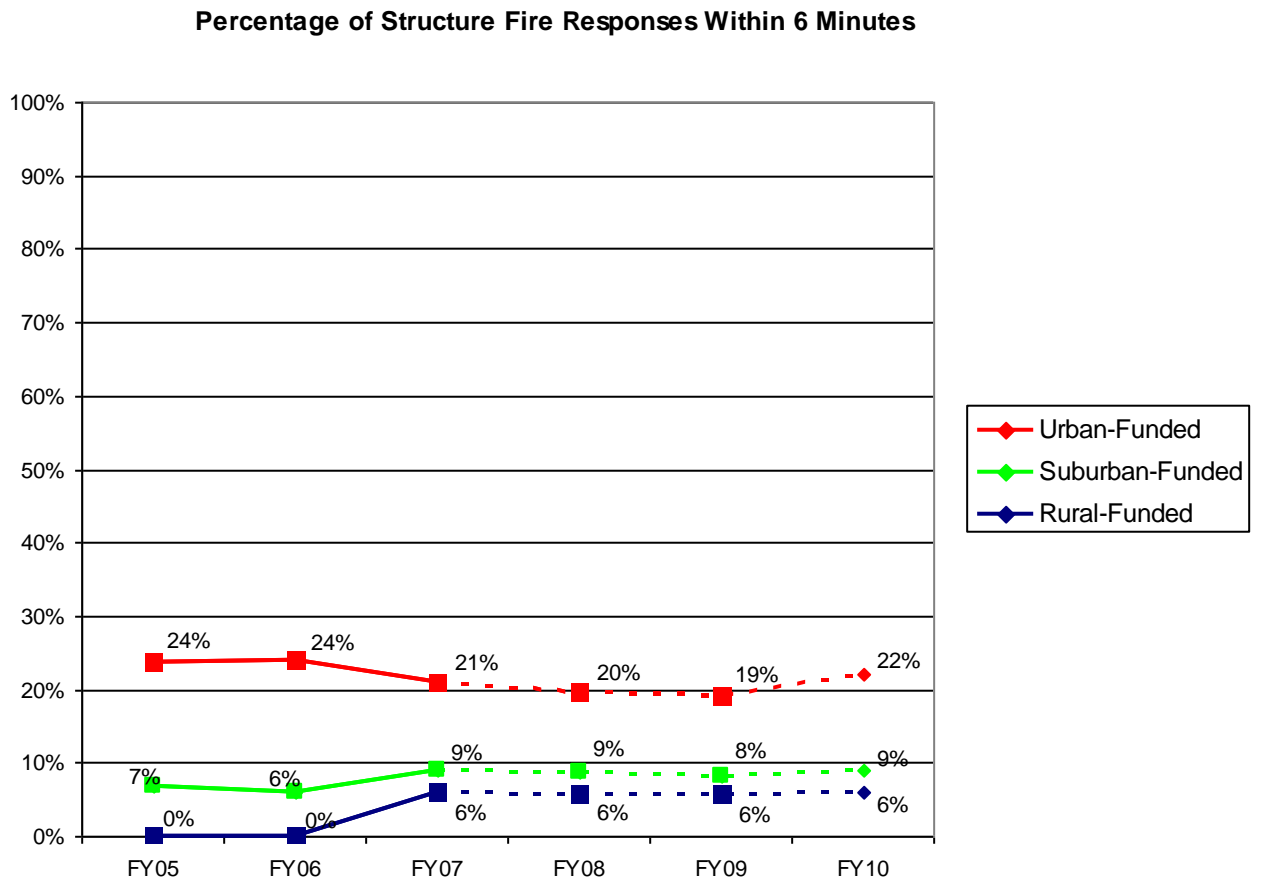
2 – PERFORMANCE



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FOR FIRE CHIEF THOMAS W. CARR, JR.

The graph above indicates response performance relating to advanced life support (ALS) incidents. Solid lines indicate actual historical data for FY05-07, and dashed lines indicate projected performance based on trends as well as the derived benefits of programs, initiatives, and resource enhancements to be implemented. It is important to note that this graph does not reflect response time of first-responders (i.e., EMTs aboard an ambulance, engine, aerial unit, rescue squad, or other unit), often arriving before ALS units. The response time goal for a first-responder unit is 6 minutes versus 8 minutes for an ALS unit. First responders are trained, certified, and equipped to perform basic life support services, including life saving actions such as rescue breathing, cardiopulmonary resuscitation (CPR) and use of automated external defibrillators (AED).

The graph below indicates response performance relating to structure fires. Solid lines indicate actual historical data for FY05-07, and dashed lines indicate projected performance based on trends as well as the derived benefits of programs, initiatives, and resource enhancements to be implemented.



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FOR FIRE CHIEF THOMAS W. CARR, JR.

3 – STORY BEHIND THE PERFORMANCE

Several factors contribute or restrict the ability of MCFRS to reach the scene of life-threatening medical emergencies and structure fires in time to save lives and have a major impact on minimizing property damage. These factors are presented below in order of priority.

RESTRICTING FACTORS

FACT: For each minute that elapses following cardiac arrest, absent the provision of effective cardiopulmonary resuscitation and/or defibrillation, the patient's chances of survival decrease by approximately 10%.

a. **9-1-1 call-taking, call processing, and dispatching of units:** Presently, the ECC averages about 3 minutes obtaining vital information from those reporting emergencies, processing that information, and dispatching appropriate units. Time-consuming protocols (many State-mandated) and a cumbersome computer-aided dispatch system are largely responsible for this problem. NFPA Standard 1221 states that ECC call-taking, call processing, and dispatch should require no more than one minute. Likewise, the response time model⁵ employed by MCFRS assumes one minute for this process.

b. **Turnout time:** Currently, the average turnout time⁶ for all incident types combined is about 1¾ minutes. The average is skewed upwardly by turnout time for BLS incidents (EMS incidents of a non-life threatening nature), which could be improved substantially. While average turnout times for fire and ALS (life threatening) incidents are significantly less due to their critical nature, these times could be improved as well. Factors impacting turnout time include: distance personnel must travel to reach apparatus, safety requirements (i.e., donning protective gear and fastening seat belts before departure), perceived urgency of the incident, and type of incident (e.g., a structure fire incident will typically prompt a faster turnout than would an Alpha or Bravo-level EMS incident).

c. **Travel time:** Travel time for responding MCFRS apparatus is an issue in much of the county, particularly in suburban and rural areas. Travel time issues can be broken down into three primary factors; each described below.

- **Insufficient resources:** See item “b” under Restricting Factors in Performance Measure #1. The problem applies to EMS resources as well as fire resources.
- **Insufficient staffing levels on suppression units:** See item “c” under Restricting Factors in Performance Measure #1.

⁵ The MCFRS definition of response time, used in the response time model and upon which response time goals are based, is: **the elapsed time from receipt of 9-1-1 call to arrival of unit(s) at the incident scene.**

⁶ Turnout time is the time between dispatch of units and departure of units from their station.

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- **Road/traffic conditions:** Traffic congestion has a negative impact on response time as do road conditions such as potholes, wetness, ice/snow, and traffic calming devices.

CONTRIBUTING FACTORS

- a. **Station distribution within urban areas:** Unlike the remainder of the county, the down-county area has an adequate distribution of fire-rescue stations and resources which positively impact response time. Consequently, response times in the down-county are closer to established goals than anywhere else in the county.
- b. **New up-county stations:** By early FY10, two new fire stations will have opened in the Kingsview and Milestone areas of Germantown. In addition, an interim station is planned for the Travilah/Traville area. The EMS and fire suppression resources deployed at these three new stations will reduce response times in these high call volume areas of the up-county.
- c. **New roads:** The opening of new roads provides MCFRS units more direct routes of travel to incidents as well as more alternatives when preferred routes of travel are congested or blocked. The future Inter-County Connector and the Montrose Parkway will result in improved response times in portions of the county served by these roads.

4 – WHAT WE PROPOSE TO DO TO IMPROVE PERFORMANCE

To move toward meeting the MCFRS' response time goals for ALS incidents and structure fires, MCFRS plans to pursue the following actions, programs, and initiatives between FY08 and FY10:

- a. **Reduction in time taken to process 9-1-1 calls and dispatch units:** Resources and procedural changes that are needed to accomplish this reduction include:
 - Additional ECC personnel
 - Modification of time-consuming State and County protocols and procedures that unnecessarily delay call-processing and dispatch
 - Information technology enhancements to CAD and station alerting systems
- b. **Reduction in travel time:** Resources and procedural changes that are needed to accomplish this reduction include:
 - Strategically placed stations – to be accomplished by adding new stations and, where appropriate, relocating existing stations
 - Full implementation of the four-person staffing plan and 1 + 1 ALS model
 - Deploying additional apparatus/staff and deploying them strategically (e.g., deployment of an EMS flex unit in Silver Spring)

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- Continued community outreach campaign (i.e., “Hear Us, See Us, Clear for Us” campaign initiated in FY06) that encourages motorists and pedestrians to yield right-of-way to responding MCFRS vehicles
- c. **Reduction in turnout time:** Resources and procedural changes that are needed to accomplish this reduction include:
- Development of turnout time goals that balance speed and safety
 - Strict supervision by MCFRS battalion chiefs, station commanders, and unit officers to ensure personnel are meeting turnout time goals
 - Use of more pre-alerts that will result in faster boarding of apparatus

5 – BUDGET

Cost to implement Phases 2B and 3 of the four-person staffing plan during FY09-10
(See cost in Performance Measure #1)

CIP costs to establish an interim station on PSTA property, plus annual personnel costs to operate an engine and EMS unit at this station (See cost in Performance Measure #1)

\$600,000* – Annual cost of initiating an EMS “flex” unit, including vehicle and staffing

Cost of additional positions at ECC – To be determined (TBD) following further study

Cost of new CAD and station alerting technology – TBD following further study

Cost of developing and implementing more efficient ECC processes for call-taking and dispatch - TBD following further study

* Estimated cost

6 - IMPLEMENTATION

See Appendix B

7 – DATA DEVELOPMENT AGENDA

- Make improvements to the recording of ALS and structure fire incident data in the Firehouse record management system to ensure that all required and useful data fields are completed and data is accurate. Training and quality assurance will be important elements of this process. All emergency response personnel should attend NFIRS training offered through the U.S. Fire Administration.
- Create a “canned” monthly or quarterly report showing the percentage of ALS and structure fire incidents that were responded to within respective response time goals.

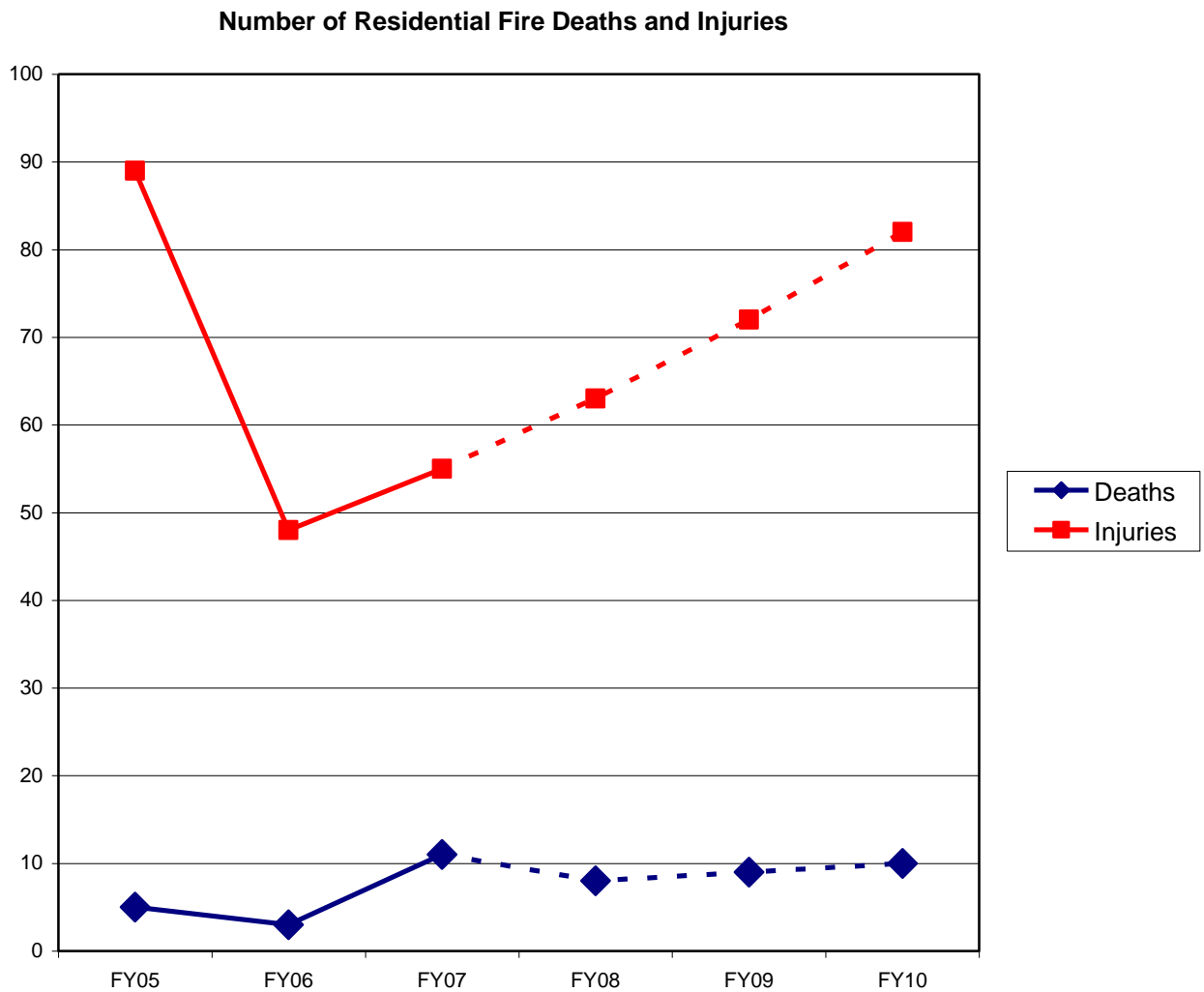
MCFRS HEADLINE PERFORMANCE MEASURE #3

NUMBER OF RESIDENTIAL FIRE DEATHS AND INJURIES

1 – CONTRIBUTION TO MONTGOMERY RESULTS

See cover page

2 – PERFORMANCE



FY08 PERFORMANCE PLAN
FOR FIRE CHIEF THOMAS W. CARR, JR.

The graph above indicates the annual number of past and projected civilian fire deaths (blue line) and past and projected number of civilian fire-related injuries (red line).

The blue line (fire deaths) is projected to decrease slightly in FY08 due to new initiatives and programs described below under “Contributing Factors” and in Section 4, but the line is then projected to increase slightly during FY09 and FY10 due largely to the expected increase in the number of seniors living in the County. Absent the new initiatives and programs, the projected number of deaths would be considerably higher.

The red line (fire-related injuries) is projected to increase by about 10-12% each year between FY08 and FY10. The increase reflects projected increases in countywide population as well as the number of senior residents. Absent the new initiatives and programs described under “Contributing Factors” and in Section 4, the projected number of civilian fire-related injuries would be considerably higher.

3 – STORY BEHIND THE PERFORMANCE

Many factors contribute or restrict the ability of MCFRS to prevent civilian fire casualties (i.e., deaths and injuries). These factors are presented below in order of priority.

RESTRICTING FACTORS

FACT: Most fire deaths in Montgomery County are caused by smoking materials, and 80% of the fire deaths from 2004-2006 have involved residents 65 years and older.

- a. **Residents’ Behavior:** Behaviors exhibited by residents is a significant factor in residential fires resulting in casualties. Residents’ unsafe house-keeping practices (e.g., storing combustibles too close to heat sources) and unsafe daily practices (e.g., smoking in bed; unattended stoves) cause many fires that are preventable. Improper behavior by residents during fires, such as attempting to fight the fire instead of evacuating or re-entering the burning residence after evacuating, has led to fire casualties as well.
- b. **Demographic factors:**
 - **Age:** Seniors (age 65 and above) and young children (age 5 and under) have the highest rates of injury and death in residential fires in Montgomery County as well as the State and nation. Alertness, mobility, and decision-making abilities are limitations associated with these age groups.
 - **Socio-economic level:** Residents having lower household incomes are much more likely to become injured or killed in a residential fire than residents having higher household incomes.

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- **Race/Ethnicity:** Race and ethnicity have a major bearing on residential fire deaths. Persons of certain races and ethnic groups are more likely to be killed in residential fires than others, based upon historical statistics.
- c. **Lack of functioning smoke alarms:** Despite County and State laws requiring smoke alarms in residences, some residences lack these life-saving devices while others have smoke alarms but they are non-functional due to lack of batteries, dead batteries, or age/condition of the smoke alarm itself.
- d. **Smoking:** Careless use and disposal of smoking materials (i.e., cigarettes and cigars) has long been the primary cause of residential fire deaths in Montgomery County. In most cases, lit smoking materials come in contact with combustible furniture or clothing when smokers fall asleep and/or are incapacitated due to use of alcohol, medications, or other substances. Improper disposal of smoking materials is a less frequent cause of fires resulting in civilian casualties.
- e. **Lack of sprinklers:** Residential high-rises and mid-rises, garden apartments, townhouses, and houses pre-dating sprinkler laws present a significant risk to occupants. Without sprinkler protection, the chance of residents being injured or killed during a serious fire is fairly high, more so if smoke alarms are not present or not functioning to provide early warning.

CONTRIBUTING FACTORS

- a. **Community outreach:** MCFRS has a robust community outreach program to educate the public about fire prevention, fire safety, and risk reduction. Elements of the program are targeted at high risk groups such as seniors, young children, and low income residents. A County-sponsored task force has been working since 2006 to address fire safety for seniors to reduce the high incidence of fatal fires involving seniors over the past five years. MCFRS received a federal Fire Act grant to fund additional outreach initiatives.
- b. **Sprinklers:** See item “b” under Contributing Factors in Performance Measure #1.
- c. **Flammability standards for cigarettes:** Maryland lawmakers have enacted a law (effective July 1, 2008) requiring that cigarettes sold within the State must be of the design known as “fire safe” cigarettes. The design includes internal bands of thick paper spaced at about half-inch intervals that serve to stop the combustion process unless the smoker draws upon the cigarette to provide sufficient oxygen to keep it burning. A carelessly discarded or dropped cigarette of this design will burn itself out, presumably before igniting nearby combustibles.

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4 – WHAT WE PROPOSE TO DO TO IMPROVE PERFORMANCE

To improve the MCFRS' ability to prevent residential fire deaths and injuries, the department plans to pursue the following actions, programs, and initiatives between FY08 and FY10.

- a. **Community outreach:** Continue fire prevention and risk reduction educational programs focused on targeted populations (e.g., elderly and immigrant populations) as well as long-standing programs having a more general application.
- b. **Implementation of recommendations concerning senior citizen fire safety:** Emphasis will be placed on implementing recommendations of the Senior Citizen Fire Safety Task Force. MCFRS has requested County moneys to fund a new position within the Community Outreach Section to coordinate the implementation of these recommendations.
- c. **Sprinkler retrofitting:** See item "e" of Section 4 in Performance Measure #1.

5 – BUDGET

\$100,000* - Annual cost (salary/benefits) of new Grade 25 position to coordinate senior fire safety initiative

\$250,000* - Annual programmatic operating costs for equipment, supplies, marketing materials, printing, etc.

* Estimated cost. Initiative delayed due to FY08 fiscal situation.

6 - IMPLEMENTATION

See Appendix B

7 – DATA DEVELOPMENT AGENDA

- Make improvements to the recording of residential fire casualty data in the record management system to ensure that all required and useful data fields are completed and data is accurate. Training and quality assurance will be important elements of this process. All emergency response personnel should attend NFIRS training offered through the U.S. Fire Administration.
- Create a "canned" monthly or quarterly report showing fire casualties.

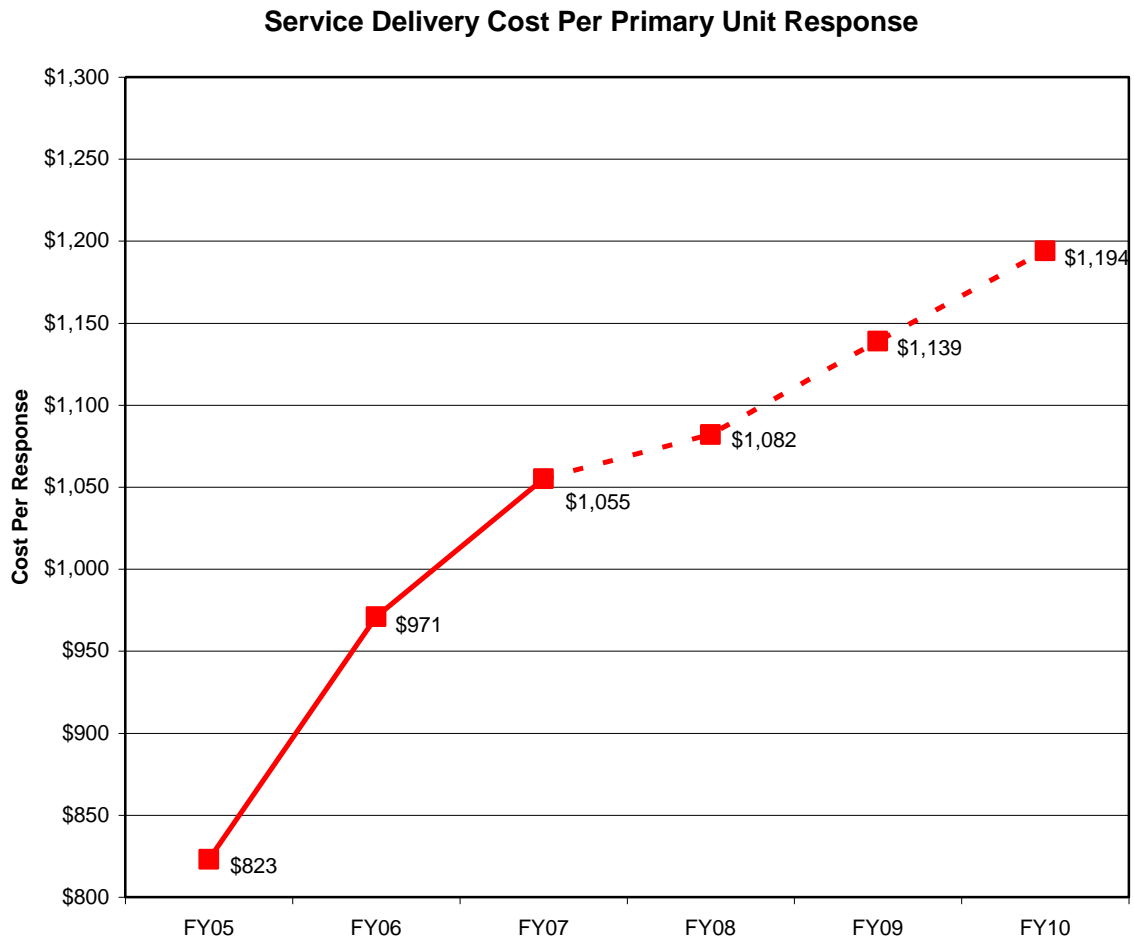
MCFRS HEADLINE PERFORMANCE MEASURE #4

COST PER PRIMARY UNIT RESPONSE

1 – CONTRIBUTION TO MONTGOMERY RESULTS

See cover page

2 – PERFORMANCE



FY08 PERFORMANCE PLAN
FOR FIRE CHIEF THOMAS W. CARR, JR.

3 – STORY BEHIND THE PERFORMANCE

Several factors positively impact (i.e., contribute) or negatively impact (i.e., restrict) the cost of service delivery per primary unit response. These factors are presented below in order of priority.

RESTRICTING FACTORS

- a. **Labor costs:** The cost of labor increases each year due to general wage adjustments and improved salaries and benefits included in bargaining agreements for union members (i.e., IAFF and MCGEO) as well as increased salaries and benefits for non-union employees.
- b. **Insurance costs:** Following national trends, the combined costs of health, dental, vision, and life insurance for individuals and the department's liability insurance, vehicle insurance, and workman's compensation insurance keep rising. Contributing factors (see below) help to keep these costs from being higher.
- c. **Inflation and market conditions:** Inflation and market conditions are responsible for steady increases in costs for energy (i.e., electricity, natural gas, propane, fuel for vehicles), apparatus, equipment, supplies, maintenance, and construction materials. The worldwide market for fuels, electricity, vehicles, and materials for manufacturing and construction has skyrocketed in recent years leading to hefty price increases.
- d. **Increasing number of incidents:** The increasing number of EMS incidents due to an aging County population and large influx of immigrants lacking medical care and health insurance has increased costs greatly for providing EMS services. This trend is expected to continue for the foreseeable future.

CONTRIBUTING FACTORS

- a. **Wellness and safety programs:** MCFRS has a comprehensive wellness-fitness program that results in healthier firefighters and a comprehensive safety program that reduces the frequency and severity of injuries. Together, these programs minimize costs for workman's compensation and missed days of work.
- b. **Training:** The Safe Driver Training Course, mandatory for all MCFRS personnel, was established in FY05 to reduce the alarming number of at-fault collisions. The course, combined with supplemental training and information provided by the MCFRS Safety Office, has resulted in lower departmental insurance costs.
- c. **Preventing the 9-1-1 Call:** Community outreach efforts have undoubtedly resulted in less 9-1-1 calls for MCFRS assistance than would have occurred otherwise. Reduced call volume results in lower expenditures for fuel, fleet maintenance, and supplies.

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4 – WHAT WE PROPOSE TO DO TO IMPROVE PERFORMANCE

To positively impact MCFRS' service delivery cost per primary unit response, the department plans to pursue the following actions, programs, and initiatives between FY08 and FY10:

- a. Reducing maintenance costs:** MCFRS will lease space in Rockville for a central maintenance facility to perform maintenance on apparatus and equipment. The centralized in-house maintenance operation will reduce departmental maintenance costs greatly due to efficiencies realized. Maintenance costs will also be reduced after new apparatus (e.g., 37 frontline pumpers on order) are delivered and placed in service, thus reducing the demand for expensive apparatus repairs to older frontline apparatus to keep them functional.
- b. Reducing insurance costs:** MCFRS wellness, safety, and training programs (see above) will have a major impact on minimizing departmental insurance costs.
- c. Reducing energy costs:** MCFRS energy costs will be minimized through station design (i.e., "green" buildings) and less fuel usage by apparatus. The latter savings will be realized with additional apparatus deployments which will translate to shorter distances traveled to incidents. Most of the additional vehicles will be housed in new up-county stations in areas previously served by existing apparatus having to travel long distances.
- d. Preventing the 9-1-1 call:** Continued community outreach efforts should result in a reduced number of 9-1-1 calls for MCFRS assistance. Reduced call volume results in less money spent on costly items and services such as fuel, fleet maintenance, and operational supplies.

5 – BUDGET

\$10 million* annually for apparatus replacement

* Estimated cost

6 - IMPLEMENTATION

See Appendix B

7 – DATA DEVELOPMENT AGENDA

Not applicable

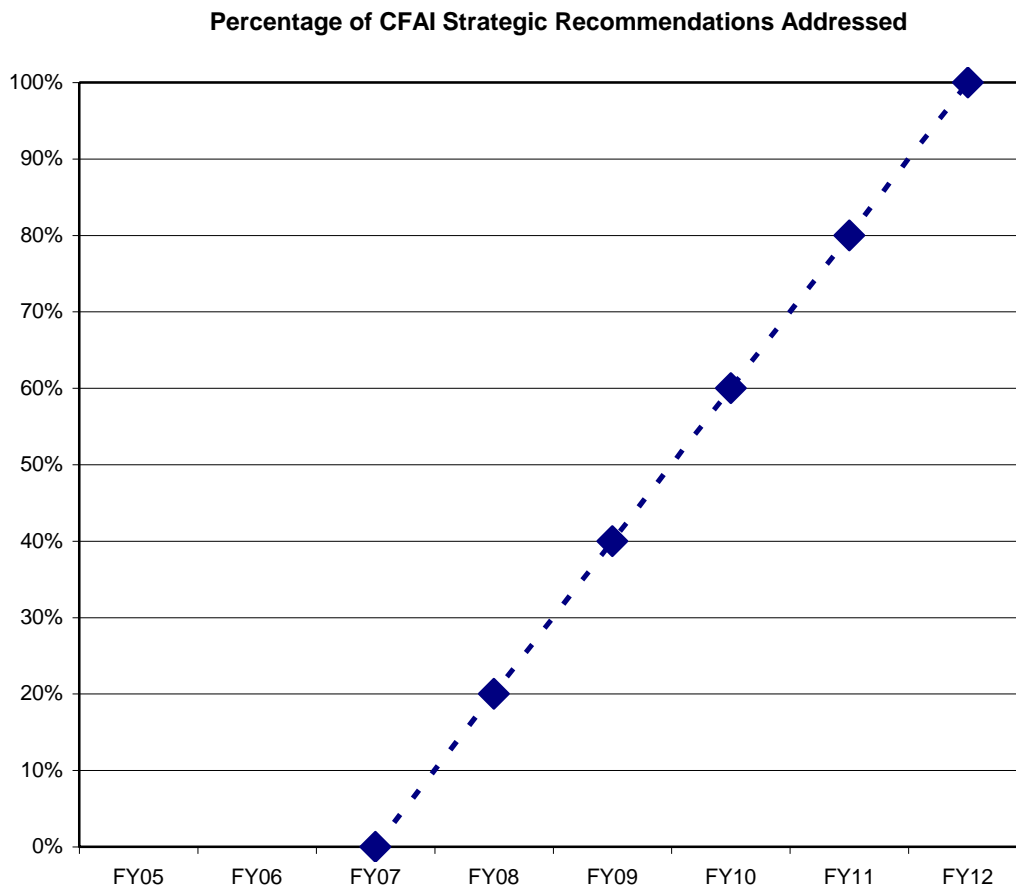
MCFRS HEADLINE PERFORMANCE MEASURE #5

**PERCENTAGE OF STRATEGIC RECOMMENDATIONS
ADDRESSED CONCERNING ACCREDITATION
FOLOW-UP REQUIREMENTS**

1 – CONTRIBUTION TO MONTGOMERY RESULTS

See cover page

2 – PERFORMANCE



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3 – STORY BEHIND THE PERFORMANCE

In 2004, MCFRS became an applicant agency for accreditation. Over the next three years, the department worked diligently on meeting the fire department core competency criteria established by the Commission for Fire Accreditation International (CFAI). In April 2007, MCFRS was evaluated by a CFAI Peer Assessment Team which determined that MCFRS met CFAI's core competency criteria. CFAI awarded accreditation status to MCFRS officially in August 2007 at their annual conference. MCFRS is now one of only three accredited fire departments in Maryland, one of 126 accredited departments nationwide, and the largest combined (career-volunteer) department to be accredited.

In addition to receiving accreditation status, MCFRS was given a list of recommended follow-up actions (i.e., "strategic recommendations") by the CFAI Peer Assessment Team addressing several areas needing improvement. Over each of the next four years, MCFRS must submit a progress report to CFAI each August describing progress made in these areas. A favorable review by the CFAI Board each year will allow MCFRS to maintain its accreditation status. After five years (i.e., 2012), MCFRS must reapply for accreditation and begin the process again to become re-accredited.

4 – WHAT WE PROPOSE TO DO TO IMPROVE PERFORMANCE

To maintain its accreditation, MCFRS must address the "strategic recommendations" provided by the CFAI Peer Assessment Team. The list below summarizes and consolidates these recommendations. MCFRS must show progress in its annual compliance report to the CFAI Board to maintain its accreditation status. The plan is to address annually - between FY08 and FY12 - about 20% of the overall workload associated with acting upon the strategic recommendations.

- Upgrading of the department's data management system to match the complexities and demands of the department
- Redefining current service level objectives presented in the "MCFRS Standards of Coverage" document submitted to the Peer Assessment Team
- Developing a clear and well-defined plan to overcome the sizeable gap between the current service level objectives and the response time goals stated in the 2005-2015 Fire-Rescue Master Plan
- Analyzing the effectiveness of call processing procedures in use at the ECC
- Conducting a detailed feasibility study of the current tiered response for emergency medical calls

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- Conducting a detailed analysis to measure patient outcomes from the two different ALS service levels (i.e., deployment of EMT-Is and EMT-Ps interchangeably) to ensure the department's desired level of service is provided
- Measuring performance as a means of achieving stated service level goals
- Updating policies and procedures for origin and cause investigations that are commensurate with accepted fire investigation standards
- Conducting training on how to properly value and record fire loss data, and developing a mechanism of quality assurance for the valuation and recording of this data

5 – BUDGET

Annual fees in the amount of \$1700 must be paid to CFAI covering the department's accreditation fee obligation until 2012. Costs of addressing CFAI's list of "strategic recommendations" will be absorbed within the annual MCFRS operating budget with the exception of any major system hardware needs or other extraordinary needs.

6 - IMPLEMENTATION

See Appendix B

7 – DATA DEVELOPMENT AGENDA

- Data for measuring patient outcomes from the two different ALS service levels (i.e., deployment of EMT-Is and EMT-Ps interchangeably), in accordance with CFAI strategic recommendation above

MCFRS HEADLINE PERFORMANCE MEASURE #6

**EMERGENCY MEDICAL SERVICES
UNDER CONSTRUCTION**

MCFRS HEADLINE PERFORMANCE MEASURE #7

**FIRE PREVENTION PROGRAMMING
UNDER CONSTRUCTION**

MCFRS HEADLINE PERFORMANCE MEASURE #8

**OPERATIONAL EFFICIENCY/OVERTIME
UNDER CONSTRUCTION**

**UUNDER CONSTRUCTION HEADLINE
PERFORMANCE MEASURES**

Three additional headline performance measures are being developed for inclusion in Chief Carr's Performance Plan. The new measures will address the following areas:

- Emergency medical services
- Fire and injury prevention (through community outreach)
- A second efficiency measure (could replace Measure #4)

These new headline performance measures will be drafted by June 30, 2008 and finalized during the first quarter of FY09.

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ADDENDUM

MCFRS Partnerships/Collaborations

Montgomery County Local Volunteer Fire and Rescue Departments
Montgomery County Volunteer Fire Rescue Association
International Association of Firefighters, Local 1664
International Association of Black Professional Fire Fighters
National Association of Hispanic Firefighters
Women in the Fire Service, Incorporated
International Association of Fire Chiefs

Montgomery County:

- Police Department
- Homeland Security Department
- Office of Human Resources
- Department of Permitting Services
- Department of Economic Development
- Department of Environmental Protection
- Office of Legislative Oversight
- County Council Members and Staff

Hospitals in Montgomery County

Adventist Health Care

Maryland-National Capital Park and Planning Commission, including Park Police

Potomac Electric Power Company

Washington Suburban Sanitary Commission

Metropolitan Washington Council of Governments

National Capital Regional Incident Management Team

Washington Metropolitan Transit Authority

Naval District Washington

Mutual Aid Fire-Rescue Departments:

- City of the District of Columbia
- Fairfax County
- Prince Georges County
- Carroll County
- Howard County
- Frederick County
- Loudoun County
- National Naval Medical Center
- National Institutes of Health

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- Naval Surface Warfare Center - Carderock
- National Institutes of Standards and Technology
- Walter Reed Army Hospital, Forest Glen Annex

Municipal Partners:

- City of Gaithersburg
- City of Rockville
- City of Takoma Park
- Chevy Chase Village

State of Maryland:

- Maryland Institute for Emergency Medical Services System
- Fire Marshal's Office
- Maryland Occupational Safety and Health (MOSH)
- Maryland Emergency Management Agency (MEMA)
- State Police
- Department of Transportation

Maryland State Fireman's Association

Maryland Fire Chief's Association

Maryland Emergency Numbers Board

Federal Government:

- United States Fire Administration
- Federal Emergency Management Agency
- Homeland Security Department
- Federal Bureau of Investigation
- Alcohol, Tobacco, Firearms, and Explosives
- Occupational Safety and Health Administration
- Federal Communications Commission
- Consumer Product Safety Commission
- National Institute for Occupational Safety and Health

National Fallen Firefighters Foundation

National Fire Sprinkler Association

National Capitol Building Industry Association

International Code Council

Home Safety Council

"NBC - Today Show"

"ABC - Good Morning America"

FY08 PERFORMANCE PLAN
FOR FIRE CHIEF THOMAS W. CARR, JR.

MCFRS INNOVATIONS

Agreement between Montgomery County and the Montgomery County Volunteer Fire -
Rescue Association
Fire Service standards and voluntary national accreditations
Length of Service Award Program (LOSAP)
EMS “flex units”
New fire engine safety innovations
“Quick Books” for LFRD financial management
Command competency requirements and lab
Personnel Information Management System (PIMS)
Compressed-air foam systems
Forensic fire mapping
Computer fire modeling for performance-based fire and life safety codes
“Risk Watch” child safety/injury prevention program
Child passenger safety seat program
Senior Citizen Fire Safety Task Force
Telestaff Electronic Staff Scheduling
Promotional Candidate Application Program (PCAP)
Pilot Incumbent Performance Evaluation Program (IPE)
Four-gas atmosphere monitoring program grant
Continuous positive airway pressure protocol
Germantown Emergency Center
Traffic safety vests
Flashover simulator
Driver simulator
FRAC Card Pilot Program
Electronic distance learning - Blackboard
Fire apparatus seat measurement program for NFFF
National Incident Management System training
“One and One” (1 + 1) advanced life support unit staffing
Advanced life support (ALS) engines
Mass Casualty Support Units
Ambulance buses
Certification standards for training, experience, and credentialing requirements,
Regulation No. 18-05AM
Safe Structural Firefighting Standard Operating Procedure
Individual Performance Planning and Assessment (IPPA)
Promotion of Healthy Lifestyles; Assessing More Effects (PHLAME)
Sarris Colon-Rectal Examination and Education Needs Program (SCREEN)
Behavioral health program
National Firefighter Near Miss-Reporting System
Crew Resource Management Training and Institutionalization
Proactive driving program
“Annual Safety Stand Down” events

APPENDIX B

FY08 IMPLEMENTATION PLAN FOR HEADLINE PERFORMANCE MEASURES

MEASURE #1 – Confining Residential Fires to Room of Origin

KEY STRATEGIES/ACTIONS

- Implement Phase 2A of four-person staffing plan
- Study alternatives for improving time taken for call-taking/processing and dispatch
- Study alternatives for improving turnout time
- Continue advocating sprinkler retrofitting of residential mid-rises and high-rises
- Develop plan for improving rural water supply sources

MEASURE #2 – Response Time to ALS Incidents and Structure Fires

KEY STRATEGIES/ACTIONS

- Study alternatives for improving time taken for call-taking/processing and dispatch
- Study alternatives for improving turnout time
- Continue implementation of resource allocation initiatives addressing reduced travel time

MEASURE #3 – Residential Fire Deaths and Injuries

KEY STRATEGIES/ACTIONS

- Begin implementation of recommendations in Senior Citizens Fire Safety Task Force report. Add Grade 25 position to coordinate implementation of this initiative.
- Continue fire prevention and risk reduction programs focused on targeted populations as well as those programs focused on the County's population at large.

MEASURE #4 – Cost Per Primary Unit Response

KEY STRATEGIES/ACTIONS

- Establish central maintenance facility at leased warehouse
- Continue wellness, safety, and training programs to minimize insurance costs
- Begin construction of energy-efficient fire stations in Germantown (i.e., Station 22)
- Continue community outreach programs to prevent the 9-1-1 call

FY08 PERFORMANCE PLAN
FOR FIRE CHIEF THOMAS W. CARR, JR.

**MEASURE #5 – Percentage of Strategic Recommendations Addressed
Concerning Accreditation Follow-up Requirements**

KEY STRATEGIES/ACTIONS

Begin five-year initiative to address strategic recommendations provided by CFAI Peer Assessment Team in April 2007. The plan is to address annually - between FY08 and FY12 - about 20% of the overall workload associated with acting upon the strategic recommendations.